

LAHIVE  
&  
COCKFIELD  
L L P

COUNSELLORS AT LAW  
28 STATE STREET  
BOSTON, MASSACHUSETTS 02109-1784  
TELEPHONE (617) 227-7400  
FAX (617) 742-4214  
lc@lahcoc.com

#11 SK 8/1/00  
JOHN A. LAHIVE, JR. (1928-1997)  
THOMAS V. SMURZYNSKI  
RALPH A. LOREN  
GIULIO A. DeCONTI, JR.  
ANN LAMPORT HAMMITTE  
ELIZABETH A. HANLEY  
AMY BAKER MANDRAGOURAS  
ANTHONY A. LAURETANO  
KEVIN J. CANNING  
JANE E. REMILLARD  
DAVID A. LANE, JR.  
JEANNE M. DIGIORGIO  
DEBRA J. MILASINGIC, Ph.D.  
NICHOLAS P. TRIANO, III  
WILLIAM D. DeVAUL

CHI SUK KIM  
DAVID J. RIKKERS  
DAVID R. BURNS  
JOHN S. CURRAN

SENIOR COUNSEL  
JAMES E. COCKFIELD

OF COUNSEL  
JEREMIAH LYNCH  
WILLIAM A. SCOFIELD, JR.  
PETER C. LAURO \*  
DeANN FORAN SMITH\*\*

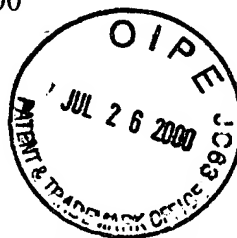
\* Admitted in NY only  
\*\* Admitted in MI only  
\*\*\* Passed the Patent Bar Examination

PATENT AGENTS  
MEGAN E. WILLIAMS, Ph.D.

1653  
TECHNICAL SPECIALISTS  
MARIA LACCOTRIPE ZACHARAKIS, Ph.D.\*\*\*  
CYNTHIA M. SOROOS  
PETER W. DINI, Ph.D.  
LAUREN C. FOSTER, D.Sc.  
EUIHOON LEE  
ERICK B. BERGLUND, Ph.D.  
LISA M. DIROCCO  
JENNIFER K. ROSENFELD  
JUDITH STONE-HULSLANDER, Ph.D.

July 19, 2000

Assistant Commissioner for Patents  
Washington, D.C. 20231



Re: U.S. Patent Application No.: 09/163,648  
Title: *Angiotensin Converting Enzyme Homolog and Therapeutic  
and Diagnostic Uses Therefor*  
Filed: September 30, 1998  
Inventor: Susan L. Acton, et al.  
Our Ref. No.: MNI-132CP

RECEIVED  
JUL 28 2000  
TECH CENTER 1600/2900

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Supplemental Information Disclosure Statement;
2. PTO Form 1449;
3. Statement of Limited Recognition under 37 CFR §10.9(b); and
4. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

<p><b>Certificate of First Class Mailing (37 CFR 1.8(a))</b> I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on:</p> <p>July 19, 2000 Date</p> <p><i>Maria C. Laccotripe</i> Maria C. Laccotripe, Ph.D., Limited recognition under 37 CFR §10.9(b)</p>
---

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

*Maria C. Laccotripe*  
Maria C. Laccotripe, Ph. D.  
Agent for Applicants  
Limited Recognition Under 37 CFR §10.9(b)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

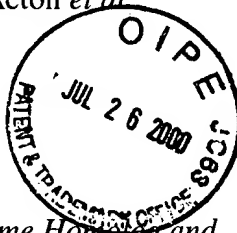
In re the application of: Susan L. Acton *et al*

Serial No.: 09/163,648

Filed: September 30, 1998

For: *Angiotensin Converting Enzyme Homologs and  
Therapeutic and Diagnostic Uses Therefor*

Attorney Docket No.: MNI-132CP



Group Art Unit: 1653

Examiner: A. Gupta

Assistant Commissioner for Patents  
Washington, D.C. 20231

Certificate of First Class Mailing (37 CFR §1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

July 19, 2000  
Date of Signature and of Mail Deposit

By:

Maria C. Laccotripe  
Maria C. Laccotripe, Ph.D.  
Agent for Applicants  
Limited Recognition Under 37 CFR  
§10.9(b)

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants and their attorney are aware of the following patents, publications or other information, which are cited on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these forms for the Examiner's consideration.


The present application is a Continuation-In-Part Application of U.S. Serial No. 08/989,299, filed December 11, 1997 (Atty. Docket No. MNI-132). All references listed on the enclosed PTO Form 1449 have been previously cited by or submitted to the Office in the prior

application, and, in accordance with 37 C.F.R. §1.98(d), copies of these references are not enclosed herewith, but will be provided upon request.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Under 37 C.F.R. § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

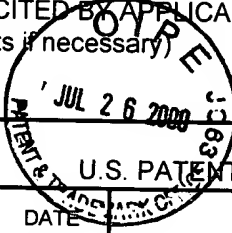
  
Maria C. Laccotripe, Ph.D.  
Agent for Applicants  
Limited Recognition Under 37 CFR §10.9(b)

28 State Street  
Boston, MA 02109  
(617) 227-7400

Date: July 19, 2000

GAD/EAH/MCL/alf

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80 LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO <b>MNI-132CP</b>	SERIAL NO. <b>09/163,648</b>
		APPLICANT <b>Acton, Susan L. et al.</b>	
		FILING DATE <b>September 30, 1998</b>	GROUP <b>1653</b>



EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	5,359,045	10/94	Soubrier et al.	536	23.2	
	A2	5,480,793	01/96	Soubrier et al.	435	212	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	A3	WO 91/00354	10/91	PCT			

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	A4	Bernstein et al., "The isolation of angiotensin-converting enzyme cDNA," <i>J Biol Chem.</i> 1988 Aug 15;263(23):11021-4;
	A5	Bernstein et al., "Mouse angiotensin-converting enzyme is a protein composed of two homologous domains," <i>J Biol Chem.</i> 1989 Jul 15;264(20):11945-51;
	A6	Erdos et al., "The angiotensin I-converting enzyme," <i>Lab Invest.</i> 1987 Apr;56(4):345-8;
	A7	Ehlers et al., "Molecular cloning of human testicular angiotensin-converting enzyme: the testis isozyme is identical to the C-terminal half of endothelial angiotensin-converting enzyme," <i>Proc Natl Acad Sci U S A.</i> 1989 Oct;86(20):7741-5;
	A8	Howard et al., "Transcription of testicular angiotensin-converting enzyme (ACE) is initiated within the 12th intron of the somatic ACE gene," <i>Mol Cell Biol.</i> 1990 Aug;10(8):4294-302;
	A9	Lattion et al., "The testicular transcript of the angiotensin I-converting enzyme encodes for the ancestral, non-duplicated form of the enzyme," <i>FEBS Lett.</i> 1989 Jul 31;252(1-2):99-104;
	A10	Soubrier et al., "Two putative active centers in human angiotensin I-converting enzyme revealed by molecular cloning," <i>Proc Natl Acad Sci U S A.</i> 1988 Dec;85(24):9386-90;
	A11	Genbank accession number p22966 angiotensin-converting enzyme, testis-specific isoform precursor (ace-t) (dipeptidyl carboxypeptidase i) (kininase ii)
	A12	Genbank accession number p22967 angiotensin-converting enzyme, testis-specific isoform precursor (ace-t) (dipeptidyl carboxypeptidase i) (kininase ii)
	A13	Genbank accession number p22968 angiotensin-converting enzyme, testis-specific isoform precursor (ace-t) (dipeptidyl carboxypeptidase i) (kininase ii)
	A14	Genbank accession number p12821 angiotensin-converting enzyme, somatic isoform precursor (ace) (dipeptidyl carboxypeptidase i) (kininase ii) (cd143 antigen)
	A15	Genbank accession number p12822 angiotensin-converting enzyme, somatic isoform precursor (ace) (dipeptidyl carboxypeptidase i) (kininase ii)
	A16	Genbank accession number p09470 angiotensin-converting enzyme precursor, somatic (ace) (dipeptidyl carboxypeptidase i) (kininase ii)

Examiner	Date Considered
*EXAMINER : Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

ATTY DOCKET NO

**MNI-132CP**

SERIAL NO.

**09/163,648**

APPLICANT

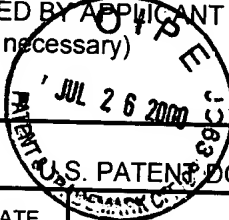
**Acton, Susan L. et al.**

FILING DATE

**September 30, 1998**

GROUP

**1653**



EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

B1	Genbank accession number p47820 angiotensin-converting enzyme, somatic isoform precursor (ace) (dipeptidyl carboxypeptidase i) (kininase ii)
B2	Genbank accession number q10714 angiotensin converting enzyme precursor (dipeptidyl carboxypeptidase i) (kininase ii)
B3	Genbank Accession number U56966 Caenorhabditis elegans cosmid C42D8
B4	Genbank Accession number X16295 Human mRNA for angiotensin I converting enzyme (ACE)
B5	Genbank Accession number J04144 Human angiotensin I-converting enzyme mRNA, complete cds
B6	Genbank Accession number A00914 H.sapiens gene for angiotensine conversion enzyme (ACE)
B7	Genbank Accession number A31567 H.sapiens testicular ECA gene
B8	Genbank Accession number M26657 Human testicular angiotensin converting enzyme mRNA, complete cds
B9	Genbank Accession number M26658 Human testicular angiotensin converting enzyme mRNA (5' variant), complete cds
B10	Genbank Accession number J04946 Mouse angiotensin-converting enzyme mRNA, 3' end, clone ACE.5
B11	Genbank Accession number J04947 Mouse angiotensin-converting enzyme mRNA, 3' end, clone ACE.11
B12	Genbank Accession number M55333 Mouse testis-specific angiotensin-converting enzyme mRNA, complete cds
B13	Genbank Accession number J03940 Mouse angiotensin-converting enzyme mRNA, 5' end
B14	Genbank Accession number U03734 Rattus norvegicus Wistar-Kyoto (Heidelberg) angiotensin converting enzyme (ACE) mRNA, complete cds
B15	Genbank Accession number U03708 Rattus norvegicus Heidelberg angiotensin converting enzyme (ACE) mRNA, complete cds

Examiner

Date Considered

\*EXAMINER

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

[illegible]

Date Considered

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE  
UNITED STATE PATENT AND TRADEMARK OFFICE**



**LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)**

Maria C. Laccotripe is hereby given limited recognition under 37 CFR § 10.9(b) as an employee of Lahive and Cockfield to prepare and prosecute patent applications wherein the patent applicant is the client of Lahive and Cockfield, and the attorney or agent of record in the applications is a registered practitioner who is a member of Lahive and Cockfield. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Maria C. Laccotripe ceases to lawfully reside in the United States, (ii) Maria C. Laccotripe's employment with Lahive and Cockfield ceases or is terminated, or (iii) Maria C. Laccotripe ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

**Expires: October 5, 2000**

A handwritten signature in cursive script, appearing to read "Harry I. Moatz", written over a horizontal line.

**Harry I. Moatz, Acting Director  
Office of Enrollment and Discipline**